dark brown. Head shagreened and punetate, the face clothed with a white pubescence; mandibles ferruginous, the teeth black. Thorax sparsely pubescent, transversely shagreened and punetured, the punctures more distinct and coarser along the hind margin of the pronotum, on the parapsides along the furrow of same, and on the scutellum. Mesopleura except the hind margin sculptured, the hind margin smooth, impunetate. Hind coxe large, reticulately sculptured. Abdomen finely or microscopically reticulated, the dorsal flap bluish.

♂.—Length 3.2 mm. Agrees well with the ♀ in color and in the structure of the head and thorax, but the tegulæ and the femora are bluish-green, the tibiæ dark brown, the tarsi, except the terminal joint, whitish, while the abdomen is bluish-green scarcely as long as the thorax, with the dorsal flap bright green.

Type, No. 4306 U.S. N. M.

Described from $1 - \varphi$ bred from the small gall.

RECOLLECTIONS OF OLD COLLECTING GROUNDS.

By H. F. Wickham, Iowa City, Iowa.

IX. The Alpine Districts about Leadville.

Leaving Buena Vista, the railroad follows the Arkansas Valley very closely in the long climb to Leadville. As the mountain summits draw nearer and nearer the waters of the turbulent stream become ever less muddy and by the time the great mining camp is reached the dwindled Arkansas is transformed into a clear brook, flowing over a pebbly bed or gliding more slowly on a torturous course through broad marshy meadows. The altitude has now exceeded ten thousand feet and the fauna and flora are essentially modified in consequence.

We arrived at the station late in the afternoon of July 7th, during a heavy rain. Every afternoon of our eight day so-journ was marred by a like precipitation of moisture and this detracted materially from the pleasure of the trip as well as interfering with collecting. These showers are very cold and quickly result in benumbed hands which are slow to grasp the ground-inhabiting insects, and the saturated dripping foliage precludes successful use of the sweep-net or umbrella. The little butterflies (apparently some species of *Lycuna*) fold

their wings and hang quite still upon the shrubs while a cold storm cloud is passing over, only to awake to active flight almost the instant that the sun comes out again.

The dirty, smoky city covers a great deal of ground and it is something of a walk from the "up town" hotels into the wooded hills which rise on every hand. The large timber, if there ever was much of it, is now mostly gone and the remaining trees are chiefly so dwarfed or undersized as to be of no use for commercial purposes. To this they owe their existence and as they still support some insects let us hope that they may long remain undisturbed. Many of the large ravines and gulches have been ruined entomologically by extensive mining operations but a few spots were found which yielded tolerably well. The stony porous soil of most of the hillsides holds but very little water and supports a fauna which is in strong contrast to that of the marshy valley region.

We saw no living Cicindelida during our stay, but some dead C. cinctineunis served to show that the species extends up the valley from Buena Vista, where it was seen rather abundantly. On the higher slopes of Moose Mountain, which lies near enough to Leadville to make the summit, though far above timber line, tolerably easy of access on foot, we took Carabus twdatus, of the form which I have always considered as representing oregoneusis and have distributed as such. was scarcely common, but we managed to get several under stones and logs in the valley of a little stream which heads on the mountain. The banks of this stream were lined with stones under which we found a few Nebria obliqua and N trifavia, Patrobus aterrimus and some Staphylinidæ, while Bembidium incertum, B. grapii and Trechus chalybeus were seenred with them but in more abundance. All of these bank loving Carabidæ were found in the wettest, coldest spots, often in the spray from a small cataract and their capture was attended with a good deal of bodily discomfort, owing to the rains and the very low temperature of the water in these mountain streams which are mainly fed from snow fields lying higher up.

Following the ravine we finally emerged from the timber and found ourselves on the bald, rocky head of the mountain, where no trees grow, for after leaving the fringe of gnarled, wind-twisted stunted evergreens that mark the timber line, the rest of the vegetation consists only of low herbs which become of less and less height as we ascend until at last we find the flowers blooming almost on the level of the ground from which they emerge—a scanty circlet of leaves, erowned by a stalkless blossom—and the spaces between the boulders are elothed with a flower-studded earpet of vegetation which has the general effect of moss, though really very different. Between timber line and the summit we secured Pterostichus surgens, Amara hyperborea, Cymindis cribricollis, Cytilus trivittatus, Aphodius aleutus, A. phwopterus, A. vittatus and fragments of the before mentioned Carabus and of Entomoscelis adonidis.

The lower hills near town were worked for Carabidæ by careful search under stones. As a result we got Notiophilus sibiricus, Pierostichus protractus, Pt. luczotii, innumerable Amaru, Calathus ingratus, Cymindis unicolor, C. cribricollis, Harpalus innocuus and H. montanus. Incidentally we secured some beetles of other families in the same situations,—Cytilus trivittatus, Cryptohypnus labbreviatus, 1C. nocturnus, C. tumescens, Graphops various, Adimonia externa and a species of Macrops. Foliage of the dwarf evergreens on these hills was beaten over an umbrella with results as follows:—Scymnus utilis, one specimen, Athens simplex, rather scarce, Podabrus lateralis more abundant, Dasytes hudsonius, a few, Callidium hirtellum, a comple, and Pachybrachys subvittatus, several. On poplars we found a Dicerca (tenebrosa?) and numerous Zengophora abnormis, the latter eating irregular holes in the leaves. Some dead tops of coniferae yielded several Magdalis, Plagithmysus muricutulus in plenty, and a specimen of Sulpingus virescens, working and miscellaneous sweeping showed up (besides some commoner things) Coscinoptera vittigera, Trichodes ornatus, Epicanta pruinosa and Entomoscelis adonidis. Rhynchites bicolor was not uncommon on wild roses. A few pieces of wood and the rubbish accumulated by a former rush of water through a deep ravine, furnished shelter for Peritaxia rugicottis and Stephanocleonus cristatus. The insects of the marshes are mostly Staphylinidæ, not yet worked out; however I can name a few beetles from these spots, as follows:—Elaphrus clairvillei, rare. Tuchinus angustatus, Mycetoporus sp., and an Erycus which seems to be morio.

Here, as at Buena Vista, we found it well worth while to search piles of logs and of sawed lumber in the railroad yards and about mills. We got in this way a very good lot of species as the accompanying list will show: Melanophila longipes, M. drummondi, Chrysobothris caurina, Buprestis langii, B. adjecta, Clevus nigriventris, C. sphegens, Thanasimus undulatus, Asemum mestam, Criocephalus agrestis, C. productus, Phymatodes dimidiatus, Pachyta liturata (light and dark forms), Acmwops proteus. A. pratensis, Leptura 6-maculata, L. sanguinea, Monohammus scutellatus and Pagonocherus mixtus. Altogether we considered our visit to this vicinity as being a successful one, although the neighborhood is probably by no means as rich as in former days before the development of its mineral resources so ruined the beauty which must have marked it previous to the advent of the railroad and the smelter.

CALOPTERYX ANGUSTIPENNIS SELYS IN WESTERN PENNSYLVANIA.*

____()_____

By E. B. Williamson, Pittsburgh, Pa.

On June 18th of this year Mr. D. A. Atkinson, J. L. Graf, H. D. Merrick and myself visited Ohio Pyle Falls, where in the course of a few hours we succeeded in taking about 40 specimens of the species named above. Males predominated. Ohio Pyle is situated on the Youghiogheny River. This river rises in Garrett and Preston counties, West Virginia; flows north into Pennsylvania, thence flowing north by northeast and emptying into the Monongahela at McKeesport, about 15 miles from the Ohio River. The Youghioghenv in its entire course is about 100 miles long. Ohio Pyle is in Fayette county, in the Laurel Ridge of the Allegheny mountains, at altitude of about 2,000 feet. It is about 12 miles north of the State line, in latitude 39° and 50' north and longitude 79° and 30' west. At Ohio Pyle the Youghiogheny has an average width of about 50 yards. Hills, several hundred feet in height, covered with decidnous trees, rise abruptly from the banks of

^{*}This brief paper is remarkable in that it gives an account of what is probably the most remarkable case of re-discovery of a rare species ever made among the North American Odonata. No other male of angustipennis has been known to exist than that in the British Museum, sent by Abbot from Georgia a century ago. Three females have been previously known. See Hagen, Psyche, v, p. 211.—P. P. CALVERT.